DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-018746 Address: 333 Burma Road **Date Inspected:** 04-Oct-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes An Qing Xing No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG COMPONENT**

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Subhasis Bera was present during the times noted above for observations relative to the work being performed.

In process Inspection

Trial Assembly Yard

This QA Inspector observed the following work in progress:

SMAW in the 4G position for the OBG segment 11AW to 11BW, weld No.OBW11B-004. The welders are identified as #046709 and #040656. ZPMC QC is identified as Mr.Zhou Peng .The welding variables recorded by QC appear to comply with WPS-B-P-2214-B-U2-FCM-1.

SMAW in the 4G position for the OBG segment 11AW to 11BW, weld No.OBW11B-005. The welder is identified as #069688. ZPMC QC is identified as Mr.Zhou Peng .The welding variables recorded by QC appear to comply with WPS-B-P-2214-B-U2-FCM-1.

SMAW in the 3G position for the OBG segment 11AW to 11BW, weld No.OBW11-005. The welder is identified as #041713. ZPMC QC is identified as Mr.Zhou Peng. The welding variables recorded by QC appear to comply with WPS-B-P-2213-B-U2-FCM-1.

SMAW in the 3G position for the OBG segment 11AW to 11BW, weld No.OBW11-001. The welder is identified as #040611. ZPMC QC is identified as Mr.Zhou Peng. The welding variables recorded by QC appear to comply

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

with WPS-B-P-2213-B-U2-FCM-1.

Bay #19

This QA Inspector observed the following work in progress:

FCAW in the 3F position for the OBG Bike path, weld No.BK004ASP1-004-009. The welder is identified as #062786. ZPMC QC is identified as Mr.Guo Xing Hui. The welding variables recorded by QC appear to comply with WPS-B-T-2133.

FCAW in the 4G position for the OBG Bike path, weld No.BK004A8-009-070. The welder is identified as #208632. ZPMC QC is identified as Mr.Guo Xing Hui. The welding variables recorded by QC appear to comply with WPS-B-T-2234-Tc-P4-F.

FCAW in the 1G position for the OBG Bike path, weld No.BK006A1-001-008. The welder is identified as #062732. ZPMC QC is identified as Mr.Guo Xing Hui. The welding variables recorded by QC appear to comply with WPS-B-T-2231-B-U2-F.

Ultrasonic Testing (UT) for Segment 11AW

This QA Inspector performed Ultrasonic testing (UT) 10% of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated a (UT) report for this date. The members are identified as OBG segment 11AW weld joints.

The welds designation reviewed are as follows:

SEG065C-005,022,024 SEG065B-001,007

During the Quality Assurance Ultrasonic Testing (UT) review of welds located on Orthotropic Box Girder (OBG) Segment 11AW, this Quality Assurance Inspector (QA) discovered the following issues One (1) longitudinal linear Class "A" rejectable indication measuring approximately 15mm in length. The indication dbs rating is a +10. Material thickness is 14mm. The depth of the indication is approximately 8.7 mm. The weld is identified as SEG65B-009 at Longitudinal Diaphragm to Floor beam "T" joint. The weld is Complete Joint Penetration (CJP) "T"joint. The weld is designated as Non Seismic Performance Critical Material (Non SPCM). The indication is clearly marked on or near the weld. The Y distance for this indication is 70 mm from Bottom Cope hole. The Segment 11AW is located at Trial Assembly Yard. The Notice of Witness Inspection (NWIT) No. is 006848. The indication is located within an area previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMC's QC personnel are required to perform hundred (100%) percent UT inspection of this weld.

This QA did not generate any incident report on this date. Ultrasonic Testing (A,B,C and D-Scan)

This QA Inspector performed Ultrasonic testing (UT) 10% of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated a (UT) report for this date. The member is identified as

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

corner joint joining between side Plate to Deck Plate for Cross beam CB16 only repair location . This Inspection was performed after ABF UT Inspectors performed UT of this joint. The result was recorded onto a data sheet according to rejection criteria of "D" Scan procedure that Caltrans QA and ABF QA have jointly filled out on this date. The QA inspector found no rejectable indication at scanned area.

The Weld Designation is as follows

CB202A-016-014

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





Summary of Conversations:

No relevant conversations

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Bera,Subhasis	Quality Assurance Inspector
Reviewed By:	Patterson, Rodney	QA Reviewer